

REMARKS/ARGUMENTS

Claims 1-3 and 7 are present in this application.

Claims 1-3 and 7 were rejected under 35 U.S.C. §103(a) over U.S. Patent No. 5,172,020 to Hibino et al. in view of U.S. Patent No. 6,218,760 to Sakuragi. This rejection is respectfully traversed.

Claim 1 defines a method of uprating electric machines including a step of removing at least a last one of the stacked lamination packages at each end of the stator core, and a step of re-stacking the removed lamination packages with a lower core loss material. The Office Action contends that “Hibino discloses the claimed invention . . .” while acknowledging that Hibino lacks each step of the method defined in claim 1. Applicants respectfully submit that since the Hibino patent lacks each step of the method defined in claim 1, Hibino is in fact unrelated to the subject application, and the Office Action fails to set forth a prima facie case of obviousness.

In simpler terms, assuming a claimed method defines step A and step B, by the logic in the Office Action, the primary reference lacks both step A and step B, but contends that the primary reference “discloses the claimed invention” except for steps A and B. The Office Action provides that such steps are defined in a secondary patent. The Office Action concludes that it would have been obvious to modify the primary patent to include steps A and B in view of the secondary patent. Applicants respectfully submit, however, that this logic does not follow and is insufficient to support an obviousness conclusion. Although this point was made in the Appeal Brief filed August 10, 2006, which apparently was successful in overcoming the rejections in light of the re-opened prosecution and purported new grounds of rejection, the Office Action fails to address this significant point of law.

In addition, it is settled that “the mere fact that the prior art could be so modified would not have made the modification obvious unless the prior art suggested the desirability of the modification. *In re Gordon*, 733 F.2d 900 (Fed. Cir. 1984). Nowhere does the Hibino patent even remotely suggest the desirability of removing at least a last one of stacked lamination packages at each end of a stator core, and re-stacking the removed lamination packages with a lower core loss material. Hibino in fact describes a stator core having end portions with low magnetostrictive core portions 12, 13, each formed by laminating a plurality of high silicon steel sheets each containing 6.5% silicon. The middle portion of the stator core 3 between the end portions 12, 13 is formed into a conventional laminated core portion 14. Using the logic proposed in the Office Action, without conceding this characterization of the Hibino structure, the Hibino patent thus would not in any manner suggest the desirability of removing and re-stacking lamination packages as such would be redundant to the disclosed structure. Without a suggestion to make the modification asserted in the Office Action, Applicants respectfully submit that the rejection is misplaced. This point was also made in the Appeal Brief and was also not addressed in the Office Action.

Sakuragi discloses a brushless motor and endeavors in one regard to reduce losses resulting from higher rotating speeds. In describing the prior art constructions, Sakuragi references prior methods for reducing iron loss, including “decreasing the iron loss of the stator core per se by replacing silicon-steel-plates which are laminated to the stator core with the plates having less iron loss.”

Notwithstanding that the Hibino patent teaches away from the modification proposed in the Office Action, the Sakuragi patent does not correct its deficiencies and similarly does not suggest the method of the claimed invention. That is, Sakuragi merely references replacing

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silicon-steel plates with lower iron loss plates. There is no reference in Sakuragi relating to removing at least a last one of the stacked lamination packages at each end of the stator core. As such, Sakuragi does not suggest that the structure of the Hibino patent could be modified to meet the claimed method steps. For this reason also, Applicants respectfully submit that the rejection is misplaced.

With regard to dependent claims 2, 3 and 7, Applicants submit that these claims are allowable at least by virtue of their dependency on an allowable independent claim.


Reconsideration and withdrawal of the rejection are respectfully requested.

In view of the foregoing remarks, Applicants respectfully submit that the claims are patentable over the art of record and that the application is in condition for allowance. Should the Examiner believe that anything further is desirable in order to place the application in condition for allowance, the Examiner is invited to contact Applicants' undersigned attorney at the telephone number listed below.

Prompt passage to issuance is earnestly solicited.

Respectfully submitted,

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